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Original Communications.

ON THE SMALLPOX EPIDEMIC IN BOSTON, IN 1872–73.

Read before the Massachusetts Medical Society, June 3, 1873.

By M. E. WEBB, M.D. Bowd., of Boston.

IT is not the intention in this paper to enter upon a scientific discussion of smallpox, but simply to give a short report of the origin, progress, abatement and general management of the disease as it existed in Boston for sixteen months, commencing January 1st, 1872, and ending May 1st, 1873. This will be presented in the form of facts, with a few statistics; leaving the conclusions to be drawn from them, in the main, to others.

It should be stated, however, at the outset, that prior to January, 1872, during at least six months, sporadic cases were continually occurring among newly arrived emigrants, or those receiving the contagion from them, and in persons who had visited Lowell during the prevalence of an epidemic there. This relates only to patients treated in hospitals, but I am informed that there was a larger number of cases existing in the city during the year 1871 than was generally supposed, but there were few removals to hospitals, and no records of cases kept. Judging from the fact that there were but few deaths, we infer that the type of the disease was exceedingly mild. It increased somewhat during the autumn, but it was not until the time at which this report commences that the disease assumed an alarming aspect or that a general removal to hospital commenced.

The only hospital accommodations existing at that time within the city limits were eight beds at a house on Albany street, in the rear of the City Hospital, and under the charge of the directors of that institution. These, however, were only for patients who could pay fifteen dollars per week, the only free beds being at Galloupe's Island; this island was used, also for quarantine purposes, and, it is needless to add, was inadequate to meet the wants of an epidemic, wholly unfit for the proper treatment of the disease, the transportation of patients endangering the lives of those very sick and no doubt causing many deaths. Moreover, the place was strongly objected to by all classes, associating it, as they did, with the neighboring penal institutions; the removal by force to such a place, was looked upon as a system of cruelty exercised upon the helpless. This was early and fully realized by Dr. Green, City Physician, who represented it in its true light to the City Council; and in due time, an order was passed authorizing the trustees of the City Hospital to receive at the house on Albany street, without pay, such patients as were too sick to be removed to the Island, and such as would go willingly when they would not be taken from their homes to the island without the exercise of force. An old building, formerly used as a hospital for cholera, upon the same grounds and adjoining the Smallpox Hospital, was partially fitted up; and these two buildings, which could be crowded to a capacity of fifty beds, were sufficient to accommodate all patients prior to July, 1872, except those exempted by law, or others from tenement houses who could not be removed without endangering life. Poor as this was, and disgraceful as it was that a city like Boston should have no better accommodations for the care of unfortunates suffering from this dread malady, it was infinitely better than nothing—better than the Island, which was the next thing to it ; and it undoubtedly prevented a general epidemic at that time with a large loss of life.

In the midst of the good work which this place, bad as it was, was undoubtedly doing, the citizens in the vicinity, bringing into service newspaper sensationalism which portrayed the horrors of having a pest house in this locality (although there never was a case of the disease traceable to it), so excited the public that a petition was extensively signed to have this nuisance abated. The City Council, after a whitewashing investigation (the principal thing being to justify their own neglect, and to throw the responsibility upon somebody else), gracefully yielded to public clamor and closed the only place they at that time possessed, without a prospect of having another; at the same time frowning upon a petition signed by hundreds of the citizens who fully appreciated the situation, and asked for the establishment of an independent Board of Health.

From the time the Albany Street Hospital was closed, there was a steady increase of the disease; the poorer classes, living in crowded localities, secreted their friends, sometimes not even employing a physician for fear that the sick one would be sent to the Island, and often a reported death would be the first intimation the authorities had that the disease existed in a certain locality. Then, of course, the information came too late to avail anything. Fumigation was performed by the Health Office, the so called Board of Health establishing the price for its performance at three dollars for one room or five dollars for a whole tenement; and the Superintendent of Health was not expected to perform this duty without the payment of this fee, or on special order from the Board. This duty was efficiently performed, however, and if this officer had had entire charge of the Department, and had not been crippled by the red tape of higher powers, the health affairs of the city would have been much more successfully and satisfactorily managed. As it was, the tenants were, in many instances, too poor, and the owners were too penurious to pay the sum demanded, and thus a large number of infected dwellings were left with no precautions whatever taken to disinfect bedding, clothing, &c., or the disinfection was partially performed by the ignorant tenants themselves.

Is it surprising that, under these circumstances, the poison was rapidly disseminated? In spite of the untiring devotion of Dr. S. A. Green, the City Physician, who sacrificed personal as well as professional interests to battle alone the advances of this enemy, and who was often openly and bitterly opposed by those in authority in whose interest he so arduously labored, pestilence walked in our streets, rode upon our horse-cars, visited our hotels and public buildings, and our tenement houses, dirty and filthy as many of them were before, now became hot beds for contagion. Against 91 cases and 32 deaths reported for the month of July when the Albany Street Hospital was closed, we had 872 cases and 246 deaths reported for the month of December, the same year.

Thus, this obstinate do-nothing policy continued, and on that policy lies the responsibility, in a great measure, of a large loss of life, a material injury to the business interests of a city crippled by a great conflagration, a harvest field from which the poison was scattered throughout the towns all over the Commonwealth, as shown by the last report of the State Board of Health. Approaching elections, however, and the general cry from all classes of citizens for reform, warned the authorities that some efforts must be exerted to stay the spread of the disease; and a large force of vaccinators were engaged to perform house-to-house vaccination. This force, unorganized and without systematized responsibility, entered upon its duty, but the result was far from satisfactory, so far as checking the ravages of the disease was concerned, and, with one or two exceptions, no records of importance were kept.

Meanwhile a piece of swamp land had been purchased on Swett street and a hospital erected which, unfortunately, was burned the night before it was ready for occupancy. Of this building, I know nothing; but the one that rapidly succeeded it, while it was undoubtedly better than none, was unfit, both by its location and appointments, for the satisfactory treatment of the disease.

In time, a new City Government was formed which, fortunately for Boston, consisted mostly of new members, fully alive to the emergency. Encouraged by the heroic action of the mayor, who knew his duty and dared to act, the City Council did what the old City Government for six months had repeatedly refused to do, namely, established a Board of Health independent of party or power. One of the first official acts of this Board was to take possession of the Roxbury almshouse as a hospital; this building proved capacious enough, with the one upon Swett street, already opened, to meet every demand. A corps of vaccinators was immediately organized and made responsible for the vaccination and revaccination of all classes. The result was highly satisfactory. The disease rapidly subsided under the combined effects of isolation and vaccination, and in three months the epidemic was conquered and public confidence was fully restored.

Having thus alluded to the rise and fall of the epidemic, I will add a few statistics bearing upon the disease, as well as to substantiate the assertions made. They are taken from the records of hospitals in this city, from those of Galloupe's Island and of the Health Office. The only record of those not removed is the bare fact that they had smallpox, and the City Registrar's office shows that nearly one-third of them died.

The number of cases of smallpox reported during the time embraced in this review was 3,722.

The whole number of deaths resulting from it was 1,026.

The percentage of mortality was 27.56.

These figures are sufficiently large to show the severity of the epidemic, exceeding the per centage of either New York or Philadelphia death-rates.

The unusual virulence of the disease is also shown by the large number of hæmorrhagic cases which occurred. Of the 1232 cases in hospitals, we find 97 of the hæmorrhagic form, or 7.58 per cent., all of which proved fatal. There was a still larger proportion among those not removed; but allowing the same percentage for the whole number of cases, we have 282 deaths from this, the most fatal form of the disease. There were a few cases that had a hæmorrhagic tendency in the earlier stages of the disease, but the eruption abated early, and the patients recovered. True cases of this kind have always died, in all the instances witnessed. It occurred most frequently in vitiated constitutions, syphilitics, drunkards, prostitutes, &c. Males and females suffered equally. The middle-aged seemed more liable to this form than the old, while it has been very rare in children; in fleshy people, it occurred rather oftener than in the emaciated. The prodromata were generally more marked than in the milder or even severe forms. Extreme prostration came on rapidly, followed by an erythema over the entire body, assuming a lobster red color. The conjunctiva was injected with blood, with here and there papules or later vesicles filled with the bloody serum characterizing the disease.

On the second day of the eruption, sometimes earlier but seldom later, hæmorrhages from the mucous surfaces would take place,—in males, from the mouth, fauces, bladder and rectum; in females, invariably from the uterus. If a woman was pregnant, she miscarried early and died from excessive hæmorrhage. It has not proved so contagious as milder forms; and there was always a peculiar odor, not experienced in either the discrete or confluent varieties. The diagnosis was, in some cases, difficult, from the resemblance to other exanthemeta, and because the characteristic appearances would not become evident till the patient was moribund or even dead; and sometimes they were discovered, even then, only by diligent search over the entire body.

(To be continued.)

TEMPERATURE IN YELLOW FEVER.

By Joseph Jones, M.D.,

Professor of Chemistry and Clinical Medicine in the Medical Department of the University of Louisiana, Visiting Physician of Charity Hospital, New Orleans, La.

The following table contains the results of my own observations upon the pulse and temperature in yellow fever, consolidated with those of several other observers; viz., W. Arnold M.D.,* Charles Faget, M.D., D.M.P. &c., 159 Burgundy street, New Orleans; Just Touatre M.D., D.M.P., 142 Dumaine street, New Orleans; and Thomas Layton, M.D., D.M.P., Magazine street, New Orleans.

My thanks are especially due to my learned and distinguished confrère, Dr. Chas. Faget, for the opportunity of examining the careful thermometric records preserved by himself, and Drs. Touatre and Layton, during the epidemic of 1870.

The general results of my investigations upon the changes of temperature and conditions of the pulse in yellow fever may be formulated thus:—

The maximum elevation of temperature, in yellow fever, is rapidly attained upon the first, second and third days of the disease, ranging from 102° F., to 110° F., in the axilla; and, as a general rule, from the third to the fifth day, steadily falls, and sinks down to the normal standard and even below; in some fatal cases, it rises again towards the end, rarely, however, reaching or exceeding, during the stage characterized by passive hæmorrhages, black vomit, jaundice and urinary suppression, 104° F.; and, as a general rule, never attains the high degree of temperature characteristic of the first stage of active febrile excitement.

The supervention of an inflammatory disease, or the occurrence of an abscess, or the access of malarial fever, after the first stage of active febrile excitement, may, in like manner, cause a progressive elevation of temperature, with slight evening exacerbations.

The pulse, at the commencement of the febrile attack, is rapid and full; the increase in the frequency of the pulse does not, however, as a general rule, continue to correspond with the elevation and oscillations of temperature, as in many febrile diseases; and, in many cases of yellow fever, the remarkable phenomenon is

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* Practical Treatise on the Bilious Remittent Fever (Yellow Fever), with illustrative Tables and Cases. On The Temperature of the System in the Febrile Diseases of Jamaica. London: 1840.

TABULAR STATEMENT OF THE VARIATIONS OF THE PULSE AND TEMPERATURE IN YELLOW FEVER.

No. of Case.	Temp. and Pulse.	Day of Disease.										Results and Remarks.
		1	2	3	4	5	6	7	8	9	10	
1	Pulse.	108	118	118								Female. Age 28. Intern. fever. Scarlet color of surface. Death on third day of disease.
	Temp.	103.5°	106.8°	108°								
2	Pulse.	110	110	108	100		120					Male. Death on ninth day.
	Temp.	108°	108°	108°	108°	110°	110°	110°		100°		
3	Pulse.	120	120									Male. Death on seventeenth day.
	Temp.	108°	108°			109°				110°	100°	
4	Pulse.		110	90		96						Male. Death on eleventh day.
	Temp.		106°	107°			108°				98°	
5	Pulse.	110	110									Male. Death on seventh day.
	Temp.	107°	108°									
6	Pulse.	100		120								Male. Death on third day.
	Temp.	107°		107°								
7	Pulse.		110	100	140							Male. Death on sixth day.
	Temp.		109°	109.5°		110°						
8	Pulse.	100	96		90	100	100					Male. Recovered.
	Temp.		105°				100°					
9	Pulse.	110	100		120	120	126					Male. Death on sixth day.
	Temp.	109°				100°						
10	Pulse.	90	85	90	85							Male. Death on fourth day.
	Temp.	108.5°										
11	Pulse.	100	90	86	86	86	80	86				Male. Death on eighth day.
	Temp.	107°			107°							
12	Pulse.		110	100	90	110	90					Male. Recovered.
	Temp.	105°	105°	105°	104°	104°	100°					
13	Pulse.			100								Male. Recovered.
	Temp.		105°	100°								
14	Pulse.	118	90	80	76	70	68	60				Male. Convalescent on fifth day.
	Temp.	103.5°	101.9°	101°	99.4°	99.4°	98.8°	98.8°				
15	Pulse.	118	110	78	70	70	68					Male. Convalescent on fourth day.
	Temp.	103°	101.9°	100°	99°	99°	99°					
16	Pulse.	116	82	84	82	78	76	80	74	60	64	Male. Case protracted, on account of formation of parotid abscess. Recovered. During fever, verat. virid. rapidly reduced pulse.
	Temp.	103.2°	101.8°	101.8°	101.6°	101.6°	101.6°	102.2°	100.8°	101.2°	99.2°	
17	Pulse.	86	62	70	60	60						Male. Convalescent on fifth day.
	Temp.	104°	101.2°	101.2°	100.2°	99.2°						
18	Pulse.	102	94	88	80							Male. Convalescent on fourth day.
	Temp.	104.4°	100.6°	99.4°	99°							

19	Pulse.	126	100	90	94	84	80					Male. Aged 67. Death on sixth day.
	Temp.	104.6°	104°	102.2°	102.2°	100°	99°					
20	Pulse.	110	75	60								Male child. Convalescent on third day.
	Temp.	104.5°	101.4°	100.4°								
21	Pulse.	120	106	90	82	92	110	90	80	70	100	Adult male. Case protracted by abscess in elbow, which appeared on third day. Convalescent on seventh day.
	Temp.	104.4°	103.5°	103.6°	104.9°	104.8°	102.8°	101.5°	101.2°	101°	100.8°	
22	Pulse.	120	80	62	80	70	70	70	70			Veratrum viride, in twenty-drop doses, rapidly reduced the pulse. Male. Convalescent on seventh day.
	Temp.	105°	101.2°	100.4°	101.8°	99.5°	99°	99.5°	99°			
23	Pulse.	120	112	110	76	76						Adult male. Age 63. Died fifth day of disease.
	Temp.	105.8°	105°	104°	100.4°	98.5°						
24	Pulse.		100	86	80	70	70					Male child. On fourth day, attack of indigestion caused rise of temperature. Convalescent on sixth day.
	Temp.		101.8°	100°	103°	99°	98.8°					
25	Pulse.	122	110	102	100	130						Death on fifteenth day of disease.
	Temp.	102.2°	103.2°	101.9°	101.1°	100.9°						
26	Pulse.	150	120	100	90	88	100	70	84			Eruption of urticaria appeared on fifth day, and caused oscillation of temperature. Convalescent on seventh day.
	Temp.	103.4°	104°	102.5°	102.2°	101°	101.4°	100.2°	100°			
27	Pulse.		110	98	84	80	80	76				Male. Age 32. Convalescent on seventh day.
	Temp.		104°	103.5°	102.4°	100.8°	100°	98.8°				
28	Pulse.	110	80	94	82	98						Adult male. Black vomit on fourth day. Death on fifth day.
	Temp.	103.8°	104.5°	103°	101.8°	101.8°						
29	Pulse.	110	100	84	90	92	90	80	104	114	114	Adult male. Died on tenth day of disease. On ninth day, temperature fell rapidly from 102.2° to 98.5°, whilst pulse increas'd to 114.
	Temp.	103.8°	104.4°	103.7°	103.6°	102.2°	101.8°	102.2°	102.2°	102.2°	98.5°	
30	Pulse.	118	116	104	100	98	100					Adult male. Died on seventh day.
	Temp.	104.2°	105.2°	104.3°	104.2°	103°	102.8°					
31	Pulse.	72	68	68	72	64	52	48	48			Male. Age 19. Jaundice on third day. Conval. on ninth day.
	Temp.	101.3°	102.2°	101°	101.5°	99.8°	100°	99.8°	99.5°			
32	Pulse.	108	100	108	99	80	70	70	60	50	44	Male. Age 23. Convalescent on seventh day.
	Temp.	Fever.	102.2°	103.8°	102.2°	100°	100.4°	98.5°	96.8°	96.8°		
33	Pulse.			110	90	74	76	64				Female child. Convalescent on seventh day.
	Temp.	Fever.	Fever.	104.5°	102.6°	102.8°	100.8°	99.6°				
34	Pulse.	130	130	110	100	84						Female. Convalescent on fifth day.
	Temp.	102.2°	104°	104.6°	102°	99.4°						
35	Pulse.		114	113	105	70	63	105	105	112	136	Adult male. Jaundice on 4th day. Black vomit on 6th day. Death on 11th day. After supervention of black vomit, pulse increas. in freq.
	Temp.	Fever.	103.6°	104.8°	104.2°	103°	100.2°	101.6°	101.3°	99.2°	99.8°	
36	Pulse.	120	120	100	90	74	72	68	78	90	80	Adult male. Convalescent on tenth day.
	Temp.	Fever.	105°	105°	103°	102°	102°	101.5°	102.8°	101°	100.2°	
37	Pulse.		108	90	80	62	60	60	54	50	50	Male. Age 27. Convalescent on eighth day.
	Temp.	Fever.	105.8°	105.9°	104.4°	103.4°	101.5°	100°	99°	96.6°	100.5°	
38	Pulse.	116	100	92	100							Male. Age 22. Temperature fell from 106.5°, third day, to 101.5° fifth day. Death on fifth day.
	Temp.	106.5°	106.5°	105°	101.6°							
39	Pulse.		85	96	110							Male. Aged 35. Jaundice and black vomit preceded death. Temperature from 106.5°, 3d day, to 99.2° on day of death, 4th day.
	Temp.	Fever.	105.9°	106.8°	100°							

TABULAR STATEMENT OF THE VARIATIONS OF THE PULSE AND TEMPERATURE IN YELLOW FEVER. (Continued.)

No. of Case.	Temp. and Pulse.	Day of Disease. 1	2	3	4	5	6	7	8	9	10	Results and Remarks.
40	Pulse. Temp.	 Fever.	112 101.8°	104 104°	100 104°	80 102.7°	80 102.6°	80 102.2°	74 101°	74 102 6°	74 101.2°	Male. Age 20. Jaundice on fifth day. Pulse became slow, but temperature remained above normal standard. Convalescent fourteenth day.
41	Pulse. Temp.	90 103°	70 102°	84 101.6°	69 104.4°	70 103.8	70 102.5°	60 101°	50 99.8°	44 99°		Male child. Under veratrum viride, rapid fall in pulse. Convalescent tenth day.
42	Pulse. Temp.	 Fever.	100 103°	85 102°	94 105°	83 104.5°	84 103.7°	84 100°				Female. Age 15. Temperature most elevated on fourth and fifth days. Convalescent on eighth day.
43	Pulse. Temp.	98 105.1°	80 105.2°	76 105°	70 103.4°	74 102.2°	84 101.2°	108 100.2°				Male. Age 40. Jaundice on third day. Pulse depressed during jaundice. Temperature fell from 105°, third day, to 100.2°, day of death, seventh day.
44	Pulse. Temp.	 Fever.	112 105°	110 104°	108 101.2°	96 102°	86 102°	69 101°	76 101°	80 99.2°	68 99.8°	Male. Age 32. Jaundice and hæmorrhage from kidneys. Convalescent on ninth day.
45	Pulse. Temp.	 Fever.	 Fever.	 Fever.	82 100°	82 100°	85 100°	80 98°	80 98°			Male. Aged 37. Jaundice, third day. Urine contained albumen and casts. Convalescent on seventh day.
46	Pulse. Temp.	 Fever.	 Fever.	 105°	 104°	 104°	130 102.5°	140 103.5°				Progressive diminution of urinary excretion. Death.
47	Pulse. Temp.	 Fever.	 Fever.	80 101°	72 101°	80 100.8°	80 101°					Black vomit. Jaundice. Urinary suppression. Death on seventh day.
48	Pulse. Temp.	 Fever.	 Fever.	84 100.5°	92 101°	80 100°						Black vomit. Jaundice and urinary suppression. Death on sixth day.

witnessed, of the pulse progressively decreasing in frequency and even descending below the normal standard, whilst the temperature is maintained at an elevated degree; and, on the other hand, the pulse frequently increases in frequency, but diminishes in force, near the fatal issue; the occurrence of copious hæmorrhages from the bowels or stomach, may be attended with sudden depression of temperature, and increase in frequency, but diminution in the force and fulness of the pulse.

The remarkable progressive decrease in the number of beats of the pulse, after the first stage of active febrile excitement, in many cases of yellow fever, appears to be due to several causes, as the anatomical changes in the heart (acute fatty degeneration), and the retention in the blood of the bile and urinary constituents.

If the temperature of the trunk rises, in the first stage of yellow fever, above 105° F., the patient is in imminent danger, and if it reaches 107° to 110° F., death is almost inevitable whatever be the mode of treatment adopted.

In cases attended with the rapid rise of the temperature to 106° and beyond, in the first stage, death sometimes occurs suddenly, and apparently solely from the effects upon the blood and nervous system of the great elevation of the temperature, as in sun-stroke.

In the fact established by the preceding table, that an elevation of temperature, above 106° in yellow fever, was invariably followed by death, we have a powerful argument for the constant employment of the thermometre, in the investigation of the phenomena of this disease, as affording some grounds not only for prognosis, but also for treatment.

In those cases which are attended with great elevation of temperature, the physician should seek to diminish the excessive heat by those measures which reduce the action of the heart, promote free perspiration and directly reduce the heat of the surface; to accomplish these ends, the most efficient remedies appear to be veratrum viride, and the sponging of the surface with water, or with a mixture of water, acetic acid and alcohol.

It appears, also, that the administration of an active purgative, either calomel or castor oil, followed immediately by one or two full doses of quinine, in the first twenty-four hours of the fever, produces beneficial effects in unloading the portal circulation, and in controlling, to a certain extent, the production of animal heat.

In yellow fever, the profession needs, in future, accurate records of the thermometric changes, as influenced in the early stages of the disease, by the measures just indicated.

The preceding table also illustrates the fact, that jaundice, urinary suppression and black vomit are often accompanied by a slow pulse and but moderate elevation of temperature.

If the thermometric changes of yellow fever be projected upon a chart, and if a comparison be instituted with the thermometric changes of the other diseases, it will be observed that those of the former disease more nearly resemble the rapid rise and sudden fall of temperature observed in varioloid, without secondary fever, mild scarlatina, and simple uncomplicated pneumonia, which runs its course without fresh accessions of inflammatory action; whilst, on the other hand, they differ materially from the rapid and oft-recurring elevations and depressions of temperature characteristic of the various forms of malarial fever.

The cause of the rapid rise and sudden declension of the temperature in yellow fever must be sought chiefly in the changes induced in the blood, and in those organs upon which the circulation and integrity of the blood depend.

New Orleans, La., July 31, 1873.

A PHYSICAL SIGN OF INTESTINAL PERFORATION.—Dr. Spaggia relates, in the *Gazetta Clinica dello Spedale Cuico di Palermo* for February (quoted in *The London Med. Record,* May 14th), the case of a woman, aged twenty-five, who died in the hospital after having suffered for some days with symptoms of peritonitis and intestinal perforation. At the autopsy, the intestines were found agglutinated by exudation of not very firm consistence, and some pus lay between the convolutions. There were found in the small intestine, three perforations at considerable distances from each other, each about the eighth of an inch in diameter, having well defined edges next the interior of the tube, and irregular on the serous surface. Attention is specially drawn to the the existence of a sound which was heard on auscultation a little more than an inch below the umbilicus. It was synchronous with inspiration and expiration, being more distinct with the former than with the latter. It resembled the respiratory sound as heard at the sides of the vertebral column in the upper dorsal region. After commenting upon the mode of production of this sound, which he attributes to the passage of gas, into and out of the peritoneal cavity, through the perforations in the intestine, Dr. Spaggia arrives at the following conclusions:

1. A murmur synchronous with the respiratory acts, heard by auscultation on the abdominal wall, and resembling the respiratory sound in intensity and character, is a diagnostic sign of intestinal perforation. 2. The absence of this murmur is, however, no indication, when other symptoms of perforation are present, that this lesion has not taken place. The sound may be absent under various conditions, such as: (*a*) Extreme smallness of the cavity into which the perforation leads, especially if it be seated deeply in the abdomen, or removed from the ear of the observer by tumors lying anteriorly; (*b*) Closure of the perforation by a loop of intestine, or by a peritoneal tumor; (*c*) Intestinal adhesions; (*d*) The filling up, by previously formed exudation, of the cavity into which the exudation leads. This physical sign, noticed for the first time by Dr. Spaggia, is the more important in that its existence may clear up certain doubtful affections of the abdominal organs, in which it is a question whether gastrotomy shall be resorted to.

Progress in Medicine.

REPORT ON OBSTETRICS AND DISEASES OF WOMEN.

By W. L. Richardson, M.D.

[Concluded from p. 189.]

DISEASES OF WOMEN.

Intra-uterine Medication.—Dr. W. S. Playfair (*Lancet*, Jan. 4, 11, Feb. 15, 1873) opposes very strongly the use of intra-uterine injections. He believes that remedies can be applied to the interior of the uterus in a fluid state by a much safer method. After criticizing the various ways recommended by writers on this subject, he proposes to use swabs made in this manner:—a series of uterine probes must be made with metallic extremities measuring in length 2½ inches. They must be so fine that, when wrapped around with cotton wool, they will pass readily into the cavity of the uterus. These probes are attached to box-wood handles nine inches in length. The ends are made very flexible, so as to be easily made to conform to any flexion of the uterus. These probes must be wrapped smoothly and evenly with cotton wool. The os uteri is next exposed with whatever speculum is most convenient. The cavity of the uterus is then carefully wiped dry with one or more of these probes. This being done, a probe is next introduced, having been previously dipped in the agent to be applied. Care must be taken to wipe off any superfluous moisture, lest it run down into the vagina. The application of remedies in this way, if carefully made, is practically painless. As regards the particular agent to be used, there is great difference of opinion among writers on this subject. The best is a strong solution of carbolic acid prepared as follows:—add to the pure crystalline acid just enough water to keep it fluid (experience has shown this to be eighty parts acid and twenty parts water); an equal quantity of glycerine is then added; to the exterior of the cervix the pure fluid carbolic acid may be applied, but for the uterine cavity it is better to dilute it with glycerine. The great advantage which carbolic acid possesses over other caustics is that it never produces an eschar, nor does it cause the tissues to swell. In using it, therefore, we run no risk of causing any contraction of the cervical canal. The acid should be applied never oftener than once a week, and an interval of three or four days should always be left before and after the appearance of the catamenia. At first the application will often cause an increase in the amount of discharge from the uterus; but this soon subsides. The time required for the cure of a case of chronic uterine leucorrhœa varies greatly, and while one or two applications may be sufficient to effect a cure in one case, they may have to be continued for months in another.

Dr. Robert Barnes (*Brit. Med. Jour.*, Jan. 11, 1873) strongly advises that the use of injections into the uterine cavity be given up in all cases of marked flexion. Even if the cervix has been first dilated with tents, he does not consider their use free from danger, for it is impossible to prevent the flexion recurring, in which case the fluid is prevented from escaping. It is especially in these cases that the uterine cavity is usually enlarged and the Fallopian tubes dilated. Except in severe and urgent cases of menorrhagia, intra-uterine injections should never be used. The same agents can be applied in other ways, the most preferable of which is in the form of an ointment or plasma.

Dr. John Clay (*Lancet*, Nov. 30, 1872, Feb. 1, 1873) recommends the use of an insufflator made very similar to that used for insufflating the larynx. The open end, however, must be provided with a movable bulbous head, as otherwise it would be plugged up with mucus while being introduced within the uterine cavity. The pressure on the rubber ball not only opens the end, but ejects the powder at the same time.

Dr. J. Whitehead (*Brit. Med. Jour.*, Feb. 1, 1873) favors the application of remedies by means of Lallemand's porte-caustique. The ointment to be used is placed in the groove of the stilette, which is protruded after its introduction within the uterine cavity, and, by rotation, every portion of the mucous membrane can be reached.

Prognosis in Cases of uterine inflammatory Diseases. (*Obstet. Jour. of Gr. Brit. and Ireland*, July, Aug., 1873.)—Dr. E. J. Tilt considers that the danger to life from uterine inflammation is very slight, unless it gives rise to some complication such as ovaritis or peritonitis. The prognosis is bad if the patient comes of sickly parents, or has had herself an unhealthy girlhood, or other mucous membranes show a marked tendency to catarrhal inflammation. When the inflammation occurs in young women, as the result of a sudden checking of the menstrual flow, the prognosis is favorable, unless the passion of the patient be very strong, in which case relapses will be apt to occur. Occasionally, however, the inflammation comes on during the period known as the change of life or even subsequent to that; in these cases the prognosis is bad. Under the most favorable circumstances, the length of time required to effect a cure will be, to a certain extent, proportional to the duration of the disease before a proper treatment was begun. So long as the disease is limited to the cervix uteri, the prognosis is good, but the case is very different when the inflammation has passed from the cervix to the mucous membrane of the body of the uterus. If the body of the womb is found to be larger and harder than normal, the prognosis is very bad. Acute endometritis is a rare disease, and Dr. Tilt states that he has never seen a case of it where there were not evident signs of a pre-existing chronic inflammation of the body or neck of the uterus.

Uterine Tumors.—Dr. Keating recently reported (*Amer. Jour. Med. Sci.*, July, 1873) to the College of Physicians (Philadelphia) the account of a case of uterine submucous fibroid treated successfully by means of hypodermic injections of ergotin. After the sixteenth injection, the tumor was reduced, by measurement, to one-third of its size, and had been crowded down upon the cervix uteri in its efforts to force itself through the os uteri. At this point, owing to the impaired health of the patient, arising from a serious anæmia consequent on frequent and prolonged hæmorrhage and an acute attack of a prevailing influenza, the further use of the drug was for a time suspended. The injections were used almost daily, and were applied over the abdomen below the umbilicus. The formula used was as follows:—Ergotin, gr. xlv.; glycerinæ, aq. destil., āā ♏ cv. Syringeful (gtt. xx.) administered each time. The injection was always attended with excessive pain lasting nearly an hour. Very little local irritation followed, care being taken to make the injections as deep-seated as possible.

Dr. John Ashhurst, Jr., gives also *(loc. cit.)* the details of a case of a submucous fibroid of the uterus treated in this same way. The formula used was: ℞. Ext. ergotæ fld., ʒjss.; glycerinæ, ʒj.; aquæ, ʒij. Of this preparation twenty minims were injected almost daily in the sub-umbilical region on one or other side of the linea alba. After sixteen injections, the tumor was found to have diminished one-half. The injections are to be resumed after a short interval of rest. Pain followed the injections in this case as in the case of Dr. Keating, but not severe enough, however, to cause the patient to make any spontaneous complaint.

In a very valuable article on Interstitial Uterine Fibroma *(Gaz. Méd.,* Paris, 11, 1872), Dr. Abeille alludes to the mistakes in diagnosis which are constantly being made, as regards interstitial tumors of the uterus, from the neglect on the part of the attending physicians to make their examinations during menstruation. It is during this period only that these tumors can be readily detected, since then nature, in her effort to expel the tumor, pushes it downwards towards the cervix uteri, causing an unusual dilatation of that region. These tumors are by far the most dangerous of all uterine tumors, since they give rise to severe metrorrhagia and, owing to their peculiar position, are very easily overlooked in examinations of the uterus.

M. Gueniot, in a recent paper *(Gazette Méd.,* Paris, 11, 1872) contributed to the Académie de Médecine (Paris), considers that so many cases have now been reported as to establish, beyond question, the fact that certain fibroid tumors of the uterus are absorbed and thus disappear. While the absorption of tumors is, as a rule, a slow process, yet, occasionally, they take on a rapid dissolution, some cases having been reported where very large myomata have disappeared within a few months. In cases where absorption does not take place, uterine myomata may disappear either by spontaneous expulsion or by gangrenous suppuration. The method of absorption is the only one which is free from danger, and the efforts of the attending physician should therefore be directed towards bringing about this termination of the disease. Reasoning from analogy, these tumors, before they can be absorbed, must undergo a fatty degeneration. The remedies to be advised therefore are such as are known to favor a fatty metamorphosis of tissue. Such agents are arsenic, phosphorus, lead, &c. The puerperal state of the patient exercises only rarely any influence on the absorption of these tumors.

Dr. R. C. M. Page reports *(Med. Record,* Feb. 1, 1873) a case of a fibroid tumor of the uterus which was absorbed during pregnancy, and entirely disappeared during the retrograde development of the uterus after delivery.

Dr. Wm. R. Jordan reports *(Lancet,* March 29, 1873) two cases, in which large fibroid tumors of the uterus were successfully treated by a method known as enucleation. In the first case, a large tumor occupied the anterior wall of the uterus, presenting no marked projection into the cavity. An incision was made at the lowest point of the tumor about half an inch in depth. The cervix uteri was also divided on a line with the incision. The tumor was gradually protruded by the expulsive efforts of the uterus, until, on the 19th day, it was found filling the cavity of the vagina, from which it was easily removed. In the second case, the tumor occupied the posterior and left wall of the uterus. A similar mode of treatment was adopted. Nature at once set up expulsive efforts, and the tumor (27 ounces) was found filling the vagina on the third day after the operation. Owing to the great size of the tumor in this second case, ergot was given for several days after the tumor was removed, to aid the contraction of the uterus and as a prophylactic measure against the occurrence of hæmorrhage.

Ovarian Tumors.—Ovariotomy. Dr. J. Marion Sims has recently published (*New York Med. Jour.*, Dec., 1872—April, 1873) two excellent papers on this subject. In them he very briefly alludes to the past history of the operation and to the various methods which have been proposed for the management of the pedicle. For twenty years, he has advocated the plan of tying the pedicle with silver wire, and still thinks that it is the best treatment thus far proposed, though he questions whether it will not be found better in the future to apply torsion to the arteries, or else obliterate them by the enucleation of the pedicle from the coats of the cyst. As regards the results of the operation, Dr. Sims thinks that the mortality is altogether too great. He claims that the death of most of the patients is to be attributed to septicæmia. After carefully examining Mr. Spencer Wells's thirty-nine fatal cases, he considers that thirty-seven were the result of blood-poisoning, three being from pyæmia, and thirty-four from septicæmia. In all of these fatal cases, in which a *post-mortem* examination was made, a quantity of reddish serum, or grayish turbid serum or acrimonious serum was found in the peritoneal cavity. It is to these pent-up fluids that the blood-poisoning owes its origin. It seems, therefore, logical that the indication for treatment in these cases is to invent some method of draining off these poisonous fluids. As early as 1855, Dr. Peaslee (*"On Ovarian Tumors,"* page 509) used intra-peritoneal injections with a view to remove any accumulation of fluid within the peritoneal cavity. Instead, however, of occasionally washing out the cavity at the top, as Peaslee proposed, Sims advises that the peritoneal cavity should always be opened at the bottom, so that the fluids may constantly drain off. This opening should be made at the lowest point, namely through the Douglas *cul-de-sac.* Here a puncture should be made, in every case, and a tube passed into the peritoneal cavity so that all effusions into this cavity may spontaneously drain off.

As showing the advantage of this plan of treatment, he gives the details of four cases in his own practice where he used this plan for establishing a drainage. In the first case, a sero-sanguinolent fluid began to pass off by the tube very soon after the operation. Occasionally, a little warm water was thrown into the peritoneal cavity, by the vaginal portion of the tube. The case made a good recovery. The second case also recovered. In the third case, the proper tube was not used, and the patient died. The fourth case did nicely, the drainage-tube being worn for about a month.

Great care must be taken, in these cases, that the puncture shall be made at the *lowest* part of the Douglas *cul de sac.* In washing out the peritoneal cavity the utero-vesical pouch must be carefully washed out, so that its contents (if any) shall overflow into the

Douglas *cul de sac.* If care be taken in reference to these collections of fluid in the peritoneal cavity, one great source of septicæmic poisoning will be removed and the mortality which follows the operation of ovariotomy will be very greatly reduced.

Dr. A. Wernich (Berlin) gives *(Beiträge zur Geburtshülfe und Gynäkologie*, vol. 11, 2, pp. 143–149) an excellent *résumé* of the various opinions held by leading obstetricians as to the prognosis in cases of ovarian tumors when complicating pregnancy. In a case under his own care, an abdominal tumor, which had existed for some time without causing the patient any trouble, became the seat of the most violent pain a short time before delivery. Three weeks after delivery, the patient died and the tumor was found to be an ovarian medullary carcinoma. The writer thinks that very probably this tumor, originally benign, became under the influence of pregnancy transformed into one of a malignant character. Many writers, amongst whom may be mentioned Spiegelberg, Waldeyer, Rokitansky, Virchow, Wells and Hicks, have reported cases in which ovarian tumors took on a rapid growth during pregnancy, and after death were found to be malignant in character. These cases induce the author to approve of the conclusions reached by Dr. Wiltshire (London), who advises the extirpation of a multilocular ovarian tumor as early during pregnancy as the diagnosis of its existence can be established. All other methods of treatment he considers useless.

Dr. Ollier *(Orleans)* gives the details of a very remarkable case of pregnancy following ovariotomy (*Revue Méd. Française et Etrangère*, Dec. 28, 1872). The patient had been four times pregnant. For some time she had suffered from ovarian disease and three times had been tapped for the ascites occasioned by it. Subsequently, ovariotomy was performed and the tumor, which was found to be unadherent, was removed. The woman made a good recovery, and, three months after the operation, became pregnant. At the end of nine months she was delivered of twins.

Dr. Tillaux reports a case *(Gazette Hebdomadaire*, 12, 1873) of a unilocular ovarian cyst sucessfully treated by puncture through the wall of the vagina. The operation was followed, the first time, by the evacuation of about six pints of a fluid resembling in color *café au lait.* Tincture of iodine and water (2-1) was injected into the sac. A month later, as there were some symptoms that the sac was refilling, a second puncture was made and a pint of fetid pus evacuated. A tube was left in the sac, which was frequently washed out with solutions of carbolic acid. A month later, the sound was withdrawn. She has since been frequently seen, but there is no return of the trouble.

Les Ovaires et leur anomalies, par Le Dr. ALBERT PUECH; Paris, 1873, pp. 155.—In this most exhaustive monograph, the writer gives a complete history of the various anomalies which have been observed in reference to the ovaries. A full report is given of twenty-eight autopsies, in which some anomaly was found. The conclusions reached are thus briefly summed up :—The absence of one ovary is not very uncommon ; usually, however, other anomalies are also noticed. The accompanying complications are usually the absence of the Fallopian tube, the broad ligament, the round ligament, the uterine cornua, and the kidney of the side corresponding to the missing ovary. In ten cases out of twenty-one, the Fallopian tube was found either as a solid cord or in its normal condition. In half of the cases, the uterus was normal. As a rule, the vagina, vulva and pelvis were normal. The breasts were normal, except in two cases. The rest of the body was normal in some of the cases, while, in some, other anomalies were noted. The absence of the ovary is in no way incompatible with the perfect health of the woman.

Change of Life. (*Deutsche Klinik*, 5, 1873.)—Dr. Cohnstein, having made numerous inquiries as to the circumstances attending that period in a woman's life known as the "climacteric," has arrived at the following conclusions:—Menstruation is a physiological function, occurring between the ages of ten and forty-four. With the majority of women, the catamenia occur during a period varying from twenty-eight to thirty-four years; the average duration being thirty-one years. In 76 per cent. the menopause is gradually reached, the symptoms betokening its approach lasting from a month to two years. In 24 per cent. it is suddenly reached, such a termination being especially noticed when the sanitary conditions of the patient are unfavorable. The catamenia last longest in those women who menstruate early, who have more than three children which they nurse themselves, and are confined between the ages of thirty-eight and forty-two.

Amenorrhœa resulting from undeveloped Uteri. (*New York Med. Jour.*, June, 1873.)—Dr. W. H. Baker alludes to the insufficient attention which has been paid to the want of development of the uterus as a cause of amenorrhœa. In cases where there was a general undeveloped condition of all the reproductive organs, a corresponding want of development of the uterus has been noticed. In some cases, however, where the mammæ and the external organs of generation are normal, a careful examination will show that the uterus is undeveloped, and hence the amenorrhœa.

He cites three cases which came under his notice at the New York State Woman's Hospital, where galvanism or electro-magnetism were successfully used in the treatment of this condition.

Convulsive Diseases of Women. (*Obstet. Jour. Gr. Brit. & Ireland*, July, 1873.)—Dr. Barnes, in his Lumleian Lectures on this subject, stated the following propositions, as containing the main facts known in regard to the convulsive diseases of women.

1. Pregnancy and labor require for their due fulfilment an extraordinary supply of nerve-force.

2. This extraordinary supply of nerve-force implies a corresponding organic development of the spinal cord.

3. The provision of an extraordinary supply of nerve-force implies a greatly augmented irritability of the nervous centres, rendering them more susceptible to emotional and peripheral impressions.

4. The disturbances in nutrition, occasioned by pregnancy, almost always entail some alteration of the blood, which increases the irritability of the nervous centres, and favors the evocation of any latent convulsive or other nervous diathesis, as chorea, epilepsy, or vomiting.

5. When the blood-change wrought by pregnancy is marked by albuminuria, a poisonous action of peculiar intensity is exerted upon the nervous centres tending to produce eclampsia.

6. Obstinate vomiting in pregnancy probably sometimes proves fatal, by the development of an unknown organic or systemic morbid process.

7. Menstruation resembles pregnancy, in giving rise to an exalted central nervous erethism, and ovulation is a primary exciting cause of epileptic, vomitive and hysterical convulsions.

8. At the climateric age, again, there is a renewed susceptibility to convulsive diseases.

9. Pregnancy, by evoking or producing convulsive diseases, under certain known and passing conditions, puts to the test the various theories of the pathogeny of these diseases.

10. The rational treatment of these diseases in women, must take into account the two great factors in the production of these diseases, viz.:—an exalted nervous irritability under the stimulus of the reproductive function, and lowered or empoisoned conditions of the blood.

Bibliographical Notices.

Observations on the Surgical Treatment of In-growing Toe-nail. By George Stilwell, Surgeon, Epsom. With a pamphlet by Dr. Cotting, Boston, America. London: J. A. Churchill, 1873. Pp. 8.

The proper surgical treatment of in-growing toe-nail, as it is commonly called, has of late attracted more than usual attention; and medical journals, at home and abroad, have recently published many suggestions for the cure of this troublesome complaint. An affection which compels the sufferer to be laid up for days, at irregular and inconveniently frequent intervals; which entirely prevents walking, or permits it with great distress; which deprives the patient of sleep; surely such an affection is worthy of persistent efforts for an effective remedy. Operative treatment in such a case may not possess the brilliant importance of capital surgery, but the gratitude which rewards the successful interference of the surgeon, if less demonstrative than that which follows a lithotomy, is scarcely less real, for to the patient's sense of feeling, the relief is almost beyond description.

The pamphlet of Mr. Stilwell details an operation, for which is claimed an invariable success during a period of forty years. To the author, "the evulsion, or, in plain English, the tearing out of the toe-nail appears both logically and practically bad," and, in its stead, "a comparatively painless operation to remove the offending cause" is proposed. This operation consists in the removal, with the knife, of the whole of the granulations and hypertrophied cellular tissue, after first finding the edge of the nail with a probe, as a guide, it is presumed, for the limit of the incision. This procedure is based rather on the pathology of the disease, than on a definite end in view with regard to the process of healing; for, the author observes, "we must bear in mind that it is not the nail growing into the flesh, but the soft and sensitive surrounding structure growing over the nail;" this latter being taken away, the nail is left to fulfil its natural use as a support and protection.

The paper of Dr. Cotting, originally published in this Journal,* is

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* January 2, 1873. The operation was also described in the same Journal for May 24, 1866.

re-printed by Mr. Stilwell (the cuts, as well as the text, being reproduced), as a confirmation of the theoretical and practical merits of the method above described. On superficial view, the operations, as performed by both these surgeons, would appear to be identical; but a careful comparative reading of the observations here recorded leads us to believe that there are points of difference which are important. Both the authorities operate with the knife—Mr. Stilwell because he wishes to get rid of the offending tissue, Dr. Cotting, because he wishes to do this and *something more*, namely, to make a clean wound which, in the process of healing, shall, by cicatricial contraction, substitute a new and better base of tissue under the edge of the nail, and so prevent the possibility of the subsequent overlapping by any morbid growth. To accomplish this purpose, Dr. Cotting does not limit his incision with the edge of the nail, but he takes away all the granulations, and with them a considerable portion of healthy flesh from either side and below the diseased parts, including, possibly, a segment of the nail itself.

The results which are figured in the pamphlet, and others which have been observed in cases long ago operated on, show very plainly a real loss of tissue at the side of the toe, thereby, we repeat, effectually preventing any overgrowth or overlapping by the soft tissues, or any painful pressure by the edge of the nail.

We observe a single expression in Mr. Stilwell's pamphlet, which appears to indicate that he has latterly taken a hint from Dr. Cotting, either intentionally or otherwise. In the description of the operation published a year ago by Mr. Stilwell, there is nothing to show that he did more with the knife than others tried to do with caustics, namely, to get rid of the fungous growth. He now remarks, "the operation should be sufficiently bold to ensure the full benefit." There is no particularly urgent call for "boldness" when the probe is used to cautiously limit the cut; there is, on the other hand, some demand for that surgical virtue in the free use of the knife, suggested by Dr. Cotting; and perhaps Mr. Stilwell now recognizes, but forgets to explain that the probing is superfluous.

If we mistake not, others, besides Mr. Stilwell, have failed to appreciate the distinctive feature which characterizes the *modus operandi* of the cure claimed by Dr. Cotting, and have mistaken kinship for identity in the various cutting operations.

BOOKS AND PAMPHLETS RECEIVED.

Transactions of the Medical Society of the State of California during the Years 1872 and 1873. Sacramento. 1873. Pp. 252.

Body and Mind, to which are added Psychological Essays. By Henry Maudsley, M.D. London: Macmillan & Co. 1873. Pp. 342. (From A. Williams & Co.)

A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M.D. Second Edition. Philadelphia: Lindsay & Blakiston. 1873. Pp. 334.

Skin Diseases; their Description, Pathology, Diagnosis and Treatment. By Tilbury Fox, M.D. Lond. Second American from Third London Edition, re-written and enlarged. New York: William Wood & Co. 1873. Pp. 532.

Boston Medical and Surgical Journal.

Boston: Thursday, August 28, 1873.

The new Training School for Nurses, attached to the Massachusetts General Hospital in Boston, whose circular has lately been distributed among some of the physicians of this State, will open about the first of next November, and begin its work by taking charge of certain wards in one of the wings of the hospital. Mrs. Billings, who is known in Boston as an accomplished and faithful nurse, has been appointed superintendent of the school, and has now gone to the Training School attached to Bellevue Hospital in New York, to become familiar with the system of teaching in use there.

There will be attached to each ward, one or two nurses and two or three pupils, according to circumstances. One of the nurses will pass the night in the hospital, ready to be called by the watcher, in case of emergency. Both nurses and pupils will be in the hospital only when actually on duty, a home being provided for them by the school, in a house close to the hospital gate. The whole corps will be under the authority of the Resident Physician and subject to the rules of the hospital.

The school starts under excellent auspices. Generous donations placed in the hands of the committee enable it to undertake the expenses of the first year without anxiety, while several candidates have applied to become pupils. Systematic training is not a new thing in Europe, but it is mainly to the great school connected with St. Thomas's Hospital, in London, that the origin of this school is to be traced. A fund raised as a memorial for the services of Florence Nightingale was, at her request, applied to the foundation of that school, which has now been in operation over twelve years, and has supplied many superintendents and trained nurses to other institutions in various parts of England and the British Provinces. The school in New York, which was the first regularly organized school in the United States, also received its superintendent from England, if not directly from St. Thomas's Hospital. In view of the fact that these institutions have been successful in England, that the value of them is nowhere questioned, it is rather surprising that similar schools have not been introduced here before.

The main points in which the school system of nursing differs from the ordinary system of hospital nursing are these. While there is a head nurse to each ward, all the head nurses are under the direction and supervision of the superintendent of the school, who is responsible to the Resident and Attending physicians for the prompt and careful performance of their orders. The pupils serve as assistant nurses and relieve each other in turn through the day and night, returning to the home when not on duty. In this way, they have an entire change of scene and occupation, and a chance to become more thoroughly refreshed than they could if they lived all the time in the hospital Careful instruction is given on all subjects connected with nursing, including the practical management of splints, trusses and other mechanical apparatus, and also in all kinds of manual manipulation, the practical application of electricity, &c.

A diploma is given after two years' attendance at the school. At the end of the first year the pupils will become nurses, and receive a regular salary. They will still continue to live in the home, and will be employed in the hospital, in private families, or among the poor. It is intended that after graduation the interest of the nurses in the welfare of the school shall be kept up as much as possible, and arrangements will be made by which the home will also serve as a registry and employment office for nurses. We wish the enterprise every possible success.

We notice, in the papers, that the State Constabulary have shown unusual activity of late, and that liquor seizures are becoming more and more frequent. A few days, ago an extensive raid was made on several small proprietors, and liquor was removed amid great excitement, a mob of two thousand at times following the officers. We presume that this activity is in some way connected with the fall political campaign, and yet we cannot read these accounts without a strong feeling of indignation, that a free and civilized community should be subjected to a species of tyranny, for it can be called nothing else, such as the State is now inflicting upon her citizens. It is a well known fact that the best medical authority is in favor of the introduction of cheap light wines and the use of beer as the best means we have at our command to diminish drunkenness. Testimony has not been wanting, either in quantity or quality, and, in the face of it all, we are actually subjected to these daily outrages by a miserable set of pie and bean-fed politicians, who do not appear to be acquainted with even the most common and simple laws of health. The wretched physique of the poorer classes of Americans in the country is evidence enough of this deplorable state of ignorance. We think our country practitioners are much to blame for this state of affairs, and we call upon them to do, as they easily can, a good missionary work on the subject of proper food and drink. As matters stand now, we are making ourselves the laughing stock of the world, and every good physician ought to feel, in part at least, responsible for and ashamed of the liquor law.

In reply to the inquiries of our correspondent in another column, we would say that there are a number of Boston physicians, especially among the younger men, who have made electro-therapeutics a special study, both in this country and under the best teachers in Europe. They are men whose position and abilities inspire the confidence of their brother practitioners, and who are doing their utmost to rescue this specialty from the hands of unscientific men, and to place it in its proper position. We number many of them among our most valued contributors to the Journal. A great deal of good and careful work is now going on in this specialty in all parts of the world, and the value of electricity, as a therapeutic agent, may be said to be slowly but steadily increasing. It will be a long time, however (as we were assured by one of them the other day), before the categorical answer desired by "Rusticus" can be given to patients seeking the specialist's advice. There is, nevertheless, something that is certain and valuable, and if practitioners in general would make themselves more familiar with this therapeutic agent, and find out what it can and what it cannot do, electricity would, we think, become much more popular with the profession than it has been. This can easily be done, for Harvard College now has its "course for graduates," and we recommend "Rusticus" to come to town next term, and take the course on electro-therapeutics.

Health of the Khiva Expedition.—The forethought of the Russian Government in its treatment of its soldiers—"children of the Czar"—is favorably displayed in the admirable medical and hygienic arrangements of the army which marched upon Khiva. In the Turkestan division, comprising two columns (the one of 4,687 and the other of 2,352 men), although it had suffered severely from snow, rain and cold, there were, up to the 15th April, but twenty-five cases of sickness. When we consider the nature of the country through which the troops marched, and the scarcity of water, this immunity from disease appears remarkable. It is due, however, to the sanitary precautions taken, and the rigid supervision exercised in everything pertaining to the health and well-being of the soldiers. Attached to the Turkestan division are fourteen doctors, one veterinary surgeon, one apothecary, and twenty-nine medical assistants (including dressers and dispensers). A certain number of camels are reserved exclusively for the use of the sick and wounded. One noteworthy feature in the dietetic *régime* of the expedition is the substitution of tea for spirituous liquors, the latter being only given when the medical officer considers alcoholic stimulants absolutely necessary. We shall be anxious to know how far this arrangement meets the consent of the men. Whatever its advantages may be, we fear it would prove unpalatable to our own soldiers.—*Lancet.*

Correspondence.

Messrs. Editors,—The name of electricity carries with it an immense deal of power. Being something of which the public knows very little, they use the word very freely, and justly as well as ignorantly attribute great power to it. So they do to magnetism. The latter has great effect upon nervous, lazy, ignorant hypochondriacs, and on no one else.

There are three classes of patients upon whom the electricity has an effect. To one it does good; a second class it injures; the third is the class upon whom the magnetism operates so powerfully, and—so does the last advertised drug, quack or otherwise.

My reason for writing to you is to know who there are in the practice of medicine that you would point out as thoroughly competent electricians? We in the country, as well as our more fortunately situated city brothers, like to try new methods, but we wish to do it in the best way. Here is a woman, who calls herself doctor, and has a box with a battery, which she carries about, administering to all whom she can get to employ her, the most infernal crampings and twistings imaginable. The rule seems to be—the more pain the better you feel afterwards. She came in the way of one of my patients, talked about primary and secondary currents, set the machine going, and within fifteen minutes after was succeeded by an attack of hemiplegia.

Another patient of mine, a gentleman, who, for several months, had been troubled with slight rheumatic pains, after being in Boston a week or two, was induced by some hotel acquaintance to call on one of these *electricians.* The machine was set going, with very considerable pain to my friend, and, on the following day, acute rheumatism in force had him down, and for over seven weeks he was unable to be out of the house.

There are many of the profession who can tell similar stories. Many of us believe that electricity as a medicinal agent may do much to relieve sickness and pain. But we do not know which cases to recommend it in. We have told patients going to the cities to inquire. The result has been that they have fallen into the hands of these ignoramuses, who humbugged them; or into the hands of another, who, if they were female patients, hinted uterine disease, passed the speculum, applied caustic or pretended to, and set up a leucorrhœa to come home with. This has twice been done with virgins, who had never had even a pain in the back, nor a day's irregularity, nor a particle of vaginal discharge. One was a case of sciatica, the result of hip disease when a child; the other was a case of vertigo in a young lady, whose time to menstruate had not yet arrived.

Now, what shall we do? We are very much afraid to trust advertisements, even in medical journals. Can you help us along? Can you point out those who understand the specialty, and who, without prescribing something else and asking them to call again next week, will give the patients information as to whether electricity is likely to be of service; will send us word what, in their opinion, is the true course to pursue; will repress their superior knowledge, which makes them say, "Well, ——, Doctor * * * has done all I should expect *him* to do—but I see very many of these cases," &c. &c.? It is needless to add that Miss . . . . came home worse than she left it, and the electrician has made fifty dollars, and reports the case as a cure. Over three years have passed, and the patient is as bad as ever. I call her case hysteria, consequent upon dyspepsia, consequent upon cake and pie *in loco* beef and mutton. But change of diet does not cure, and I should like to know if properly applied electricity—quantity or intensity not to be talked of to Miss . . . . —will do any service? If she needs the use of the battery, let her have it. I send her to the electrician. He should consider himself in consultation with *me.* I am the one to whom he should give the opinion.

A few words from the Editorial department would help many of us, and none more than Rusticus, M.D.

Medical Miscellany.

THE BRITISH MEDICAL JOURNAL states that two cases of Asiatic cholera were reported in London during the first week of August, one of which proved fatal. They were imported from Hamburg.

"IT costs London a million of dollars, annually, to water her streets."—*Newspapers.* This is about thirty-three cents for each inhabitant. If it were to cost a dollar apiece, it would be more than that gain to every inhabitant in our cities, to have them thoroughly watered.

THE meeting of the British Medical Association proved to be much larger than was expected. Although but six hundred members had entered their names up to the day previous to the meeting, by the evening of the first day two thousand two hundred names had been registered. The opening address was delivered by the President, Sir William Fergusson, on the water supply of London. Dr. E. A. Parkes delivered the address in medicine, Mr. John Wood the address in surgery, Dr. John Burdon Sanderson that in physiology. Numerous other elaborate addresses were delivered, at the opening of the various sections. The financial condition of the Association seems to be eminently satisfactory.

TO BE LEFT TILL CALLED FOR.—A parcel upon which this was written, was found to contain when opened last week at the Euston Square parcels office, the decomposed body of a child, which had been sent from Manchester. Some time back a box similarly addressed to the same office, also from Manchester, contained the mutilated bodies of two infants. There is need for a searching inquiry here ; if such atrocities cannot be stopped by any other means, parcels "to be left till called for" will have to be declined unless properly authenticated by the sender. Of course, the public convenience would suffer by such a restriction, but child murder must be prevented, if possible, at any risk.—*Medical Press and Circular.*

SCHRŒTTER ON MOVEMENTS OF THE TRACHEA.—M. Schrötter has demonstrated to the Academy of Sciences of Vienna that the movement of the trachea and the bronchi observed by the laryngoscope differs in various individuals; sometimes it consists in a brusque displacement from right to left or from left to right at the moment of the cardiac systole; sometimes in an oblique displacement forward or backward; sometimes it is nil or almost nil. These movements he considers to be due to the pulse-tides of the aorta, and the differences to anatomical differences in the relations of the aorta with the neighboring organs. With the aid of the laryngoscope, these differences may therefore be diagnosticated.

MISS JEX BLAKE and others, having been defeated at Edinburgh by the decision of the Court of Session, have applied to the Senatus Academicus, of the University of St. Andrew's, to see what can be done for them. In appeals addressed to that body for the admission of women as students of medicine in the university, they submit their application on the following grounds among others. The most general objection to the admission of women to the university, lies in the supposed difficulty of educating them jointly with male students of medicine. This argument does not hold good in the case of St. Andrew's, as there are here no male students of medicine. A supplementary charter can be obtained if needed, without delay, and they are willing to be responsible for all contingent expenses. They are prepared to hire or build suitable premises for a school, and to arrange for a complete course of lectures, and some fifteen ladies are ready to avail themselves of the permission should the university grant it. It is rumored that the application is viewed favorably. Moreover, we see that Sir D. Weddebrown gave notice in the House of Commons lately, to ask leave to bring in a bill next session to admit women in Scotland to medical degrees, and with power to confer such degrees.

A Caution in Regard to the Unguentum Zinci Oxidi of the new U. S. Pharmacopœia.—Formerly, the unguentum benzoini which forms the base of this ointment was prepared by boiling benzoin in lard. A small quantity only of the benzoin was in this way dissolved, sufficient, however, to obviate the rancidity of the lard. In consequence of the objections made to the mode of preparing it, that the resulting ointment was of a dirty-white color, and deposited a portion of the benzoin when heated, it is directed in the new Pharmacopœia that the ointment shall be made by melting the lard with the tincture of benzoin. By this process, a larger portion of the benzoin is incorporated in the lard, and hence the zinc ointment made with it becomes irritating. In a case in which we had occasion recently to prescribe anew some benzoated zinc ointment, we were surprised to find that it proved highly irritating instead of soothing, as formerly. We were hence led to examine the ointment, and its appearance was so different from that previously used that we inferred the apothecary had made some mistake in its preparation, but we were informed by him that it had been prepared according to the new formula of the U. S. Pharmacopœia.

We call attention to this, because the use of the officinal ointment in the instance referred to caused great suffering, and if the experience of other practitioners should be in conformity with ours, it will be prudent to abandon the new formula.—*Medical News and Library.*

I am glad to see that one publishing firm has had the good sense to advertise in your Journal, as suggested a few numbers since. It is to be hoped that they will meet their reward in so doing. The book they advertise contains scenes which are "among the most exquisite pieces of art." The translation, "very well done," is said to be by the wife of one of our well-known physicians. Lex.

Messrs. Editors,—Among your large circle of readers there must be doctors in the country who have had much surgical experience, and could give their younger brethren valuable information on the subject of apparatus they have been called on to use for fracture, when the classical splints, as laid down in the books for such cases, were not at hand. Any man, of course, can exercise his ingenuity, but all men are not equally ingenious, and a clear description of the most practicable forms of improvised apparatus in common fractures would be very serviceable.

Erratum.—Page 103, 8th and 17th lines, and in the foot-note, for "Rothroch" read *Rothrock.*

Mortality in Massachusetts.—*Deaths in fifteen Cities and Towns for the week ending August* 16, 1873.

Boston, 197—Charlestown, 28—Worcester, 29—Lowell, 34—Chelsea, 9—Cambridge, 19—Salem, 17—Springfield, 14—Lynn, 21—Fitchburg, 6—Newburyport, 6—Somerville, 12—Fall River, 32—Haverhill, 8—Holyoke, 13. Total, 445.

Prevalent Diseases.—Cholera infantum, 134—consumption, 54—dysentery and diarrhœa, 25—scarlet fever, 16.

Four deaths from smallpox occurred in Holyoke and one in Springfield.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, August 23d, 153. Males, 93; females, 60. Accident, 6—inflammation of the bowels, 3—disease of the bladder, 1—bronchitis, 3—congestion of the brain, 3—disease of the brain, 5—chlorosis, 1—cerebro-spinal meningitis, 5—cancer, 1—cholera infantum, 46—cholera morbus, 4—consumption, 18—convulsions, 3—debility, 2—diarrhœa, 10—dropsy of the brain, 2—dysentery, 1—exhaustion, 1—scarlet fever, 3—typhoid fever, 5—gangrene, 1—gastritis, 1—disease of the heart, 2—disease of the kidneys, 1—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 2—marasmus, 4—measles, 1—old age, 4—paralysis, 4—parotis, 1—puerperal disease, 1—scrofula, 1—tumor, 1—ulcers of the stomach, 1—unknown, 2.

Under 5 years of age, 87—between 5 and 20 years, 6—between 20 and 40 years, 19—between 40 and 60 years, 19—over 60 years, 22. Born in the United States, 108—Ireland, 32—other places, 13.